

27/11/2007,10535187II.trn

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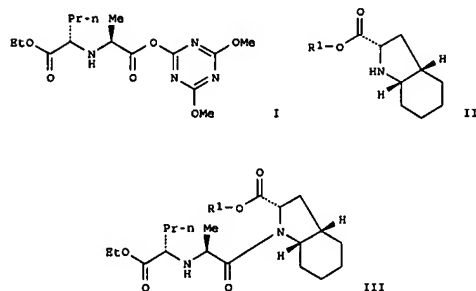
\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'HCAPLUS' AT 08:20:53 ON 26 NOV 2007  
FILE 'HCAPLUS' ENTERED AT 08:20:53 ON 26 NOV 2007  
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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	173.84	519.57
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-24.96	-24.96

=> s 16/P and 13/ract  
87 L6/P  
39 L3  
3047744 RACT/RL  
32 L3/RACT  
(L3 (L) RACT/RL)  
L8 32 L6/P AND L3/RACT

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L8 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 SD Entered STN: 03 Aug 2007  
 GI



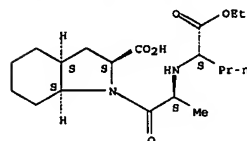
AB A process for the preparation of  
 N-[1-(S)-ethoxycarbonyl-1-butyl]-L-alanine-DMT  
 complex (I) by reaction of N-[1-(S)-ethoxycarbonyl-1-butyl]-L-alanine  
 with  
 4-(4,6-dimethoxy-1,3,5-triazin-2-yl)-4-methylmorpholinium chloride in a  
 solvent and its use in the synthesis of perindopril, perindopril erbumine  
 or pharmaceutically acceptable salts by reaction of I with compound (II)  
 (R1  
 = aryl, alkyl, or silyl protective group) in a solvent, following by  
 deprotection of compound (III) using suitable deprotecting agent, is  
 described. Thus, N-[1-(S)-ethoxycarbonyl-1-butyl]-L-alanine and  
 4-(4,6-dimethoxy-1,3,5-triazin-2-yl)-4-methylmorpholinium chloride were  
 mixed in THF and stirred for about 10 min at t° = 20-25°  
 under nitrogen. To the resulting solution contained complex I was added  
 (2S,  
 3aS, 7aS)-benzyl-perhydroindole-2-carboxylate at t° = 20-25°  
 under nitrogen, and after separation and purification 1.5 g of  
 perindopril benzyl  
 ester was obtained, which was transformed into perindopril tert-Bu amine  
 salt.  
 ACCESSION NUMBER: 2007:845244 HCAPLUS  
 DOCUMENT NUMBER: 147:212285  
 TITLE: Process for the preparation of  
 N-[1-(S)-ethoxycarbonyl-  
 1-butyl]-L-alanine-DMT complex and its use in the  
 preparation of perindopril  
 INVENTOR(S): Joshi, Narendra Shriram; Pradhan, Nitin Sharan  
 Chandra

L8 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 (ethoxycarbonyl)butylamino]-1-oxopropyl]octahydro-, (2S,3aS,7aS)-,  
 compd.  
 with 2-methyl-2-propanamine (1:1) (CA INDEX NAME)

CM 1

CRN 82834-16-0  
 CMP C19 H32, N2 O5

Absolute stereochemistry. Rotation (-).



CM 2

CRN 75-64-9  
 CMP C4 H11 N



IT 122454-52-8P  
 RL: IMP (Industrial manufacture); RCT (Reactant); SPN (Synthetic  
 preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of ethoxycarbonylbutyl alanine DMT complex and its use in  
 preparation of perindopril and perindopril erbumine)  
 RN 122454-52-8 HCAPLUS  
 CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-  
 (ethoxycarbonyl)butylamino]-1-oxopropyl]octahydro-, phenylmethyl ester,  
 (2S,3aS,7aS)- (CA INDEX NAME)

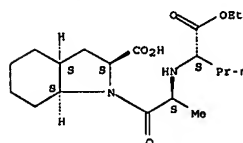
Absolute stereochemistry.

L8 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 PATENT ASSIGNEE(S): Glenmark Pharmaceuticals Limited, India  
 SOURCE: PCT Int. Appl., 16pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGES: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007085933	A2	20070802	WO 2007-IB150	20070123
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CP, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KO, KZ, MD, RU, TJ, TM				
PRIORITY APPLN. INFO.:		IN 2006-MU125		A 20060125
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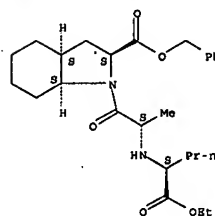
OTHER SOURCE(S): CASREACT 147:212285; MARPAT 147:212285  
 IT 82834-16-0P, Perindopril 107133-36-8P  
 RL: IMP (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of ethoxycarbonylbutyl alanine DMT complex and its use in preparation of perindopril and perindopril erbumine)  
 RN 82834-16-0 HCAPLUS  
 CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-  
 (ethoxycarbonyl)butylamino]-1-oxopropyl]octahydro-, (2S,3aS,7aS)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 107133-36-8 HCAPLUS  
 CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-

L8 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

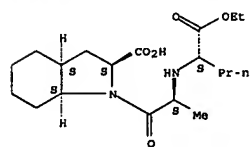


L8 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)  
 ED Entered STN: 23 Feb 2007  
 AB The present invention relates to a new process for the preparation of pure perindopril erbumine. The present invention also relates to a new process for the preparation of crystalline form D of perindopril erbumine.  
 Crystalline perindopril erbumine is formulated into a pharmaceutically acceptable dosage form. Thus, (2S,3aS,7aS)-2-carboxyperhydroindole benzyl ester was treated with N-((S)-1-carboxybutyl)-(S)-alanine in acetonitrile in presence of O-(benzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate to afford 88% perindopril benzyl ester. Hydrogenolysis of crude perindopril benzyl ester over 10% Pd/C gave crude perindopril (2.33% of diketopiperazine I, 0.54% of diketopiperazine II). Crude perindopril was dissolved in wet Et acetate, insol. impurities were filtered off, tert-butylamine was added to the filtrate, the mixture was heated to boiling, filtered and then cooled to 0° to precipitate perindopril erbumine in crystalline form D.  
 ACCESSION NUMBER: 2007:206622 HCAPLUS  
 DOCUMENT NUMBER: 146:259148  
 TITLE: A process for the preparation of perindopril erbumine for dosage forms  
 INVENTOR(S): Ham, Zoran; Purlan, Borut  
 PATENT ASSIGNEE(S): Lek Pharmaceuticals D.D., Slovenia  
 SOURCE: PCT Int. Appl., 26pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007020012	A1	20070222	WO 2006-EP7926	20060810
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRIORITY APPLN. INFO.:		SI 2005-232	A 20050612	

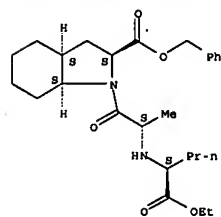
IT 107133-36-8P, Perindopril erbumine  
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of perindopril erbumine and its crystalline form for dosage forms)  
 RN 107133-36-8 HCAPLUS  
 CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)butylamino]-1-oxopropyl]octahydro-, (2S,3aS,7aS)- (CA INDEX NAME)

L8 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)



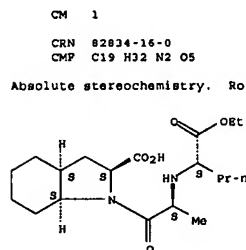
RN 122454-52-8 HCAPLUS  
 CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)butylamino]-1-oxopropyl]octahydro-, phenylmethyl ester, (2S,3aS,7aS)- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
 FORMAT

L8 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)  
 ED Entered STN: 23 Feb 2007  
 AB The present invention relates to a new process for the preparation of pure perindopril erbumine. The present invention also relates to a new process for the preparation of crystalline form D of perindopril erbumine.  
 Crystalline perindopril erbumine is formulated into a pharmaceutically acceptable dosage form. Thus, (2S,3aS,7aS)-2-carboxyperhydroindole benzyl ester was treated with N-((S)-1-carboxybutyl)-(S)-alanine in acetonitrile in presence of O-(benzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate to afford 88% perindopril benzyl ester. Hydrogenolysis of crude perindopril benzyl ester over 10% Pd/C gave crude perindopril (2.33% of diketopiperazine I, 0.54% of diketopiperazine II). Crude perindopril was dissolved in wet Et acetate, insol. impurities were filtered off, tert-butylamine was added to the filtrate, the mixture was heated to boiling, filtered and then cooled to 0° to precipitate perindopril erbumine in crystalline form D.  
 ACCESSION NUMBER: 2007:206622 HCAPLUS  
 DOCUMENT NUMBER: 146:259148  
 TITLE: A process for the preparation of perindopril erbumine for dosage forms  
 INVENTOR(S): Ham, Zoran; Purlan, Borut  
 PATENT ASSIGNEE(S): Lek Pharmaceuticals D.D., Slovenia  
 SOURCE: PCT Int. Appl., 26pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:



CM 2  
 CRN 75-64-9  
 CMP C4 H11 N



IT 82834-16-0P, Perindopril 122454-52-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of perindopril erbumine and its crystalline form for dosage forms)  
 RN 82834-16-0 HCAPLUS  
 CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)butylamino]-1-oxopropyl]octahydro-, (2S,3aS,7aS)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L8 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2007 ACS ON STN  
 ED Entered STN: 16 Feb 2007  
 AB The present invention relates to a novel crystalline η form of perindopril erbumine exhibiting characteristic 2θ values and having purity not less than 99.8%. More particularly, the present invention relates to a process for the preparation of the novel crystalline η form of perindopril erbumine comprising the steps of (i) dissolving perindopril erbumine monohydrate in halogenated hydrocarbon solvent, (ii) adding a co-solvent to the mixture of the content obtained from step (i); (iii) removing the mixture of solvents under reduced pressure in the range of 25 to 35°, and (iv) filtering off the solid obtained.

ACCESSION NUMBER: 2007:175534 HCAPLUS  
 DOCUMENT NUMBER: 146:236294  
 TITLE: Preparation of novel crystalline η (eta) form of perindopril erbumine  
 INVENTOR(S): Ujagar, Ashish; Kochrekar, D. A.; Sarjekar, Pushpalata  
 PATENT ASSIGNEE(S): Arch Pharmalabs Limited, India  
 SOURCE: PCT Int. Appl., 21pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

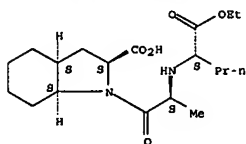
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007017894	A2	20070215	WO 2006-IN156	20060504
WO 2007017894	A3	20070510		
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PRIORITY APPLN. INFO.:		IN 2005-MU561	A 20050505	

IT 107133-36-8P, Perindopril erbumine  
 RL: PRP (Physical, engineering or chemical process); PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 (preparation and purification of η crystal form of perindopril erbumine of high purity and good solubility)  
 RN 107133-36-8 HCAPLUS  
 CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)butylamino]-1-oxopropyl]octahydro-, (2S,3aS,7aS)-, compd. with 2-methyl-2-propanamine (1:1) (CA INDEX NAME)

L8 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 1  
CRN 82834-16-0  
CMP C19 H32 N2 O5

Absolute stereochemistry. Rotation (-).



CM 2  
CRN 75-64-9  
CMP C4 H11 N

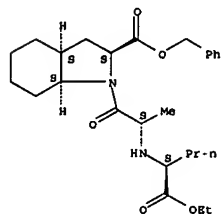


IT 690267-97-1P, Perindopril erbumine monohydrate  
RL: PSP (Physical, engineering or chemical process); PRP (Properties);  
SPN (Synthetic preparation); PRSP (Preparation); PROC (Process)  
(preparation and purification of η crystal form of perindopril  
erbumine of  
high purity and good solubility)  
RN 690267-97-1 HCAPLUS  
CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, (2S,3aS,7aS)-, compd.  
with 2-methyl-2-propanamine, hydrate (1:1:1) (CA INDEX NAME)

CM 1  
CRN 82834-16-0  
CMP C19 H32 N2 O5

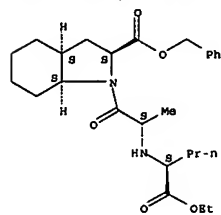
Absolute stereochemistry. Rotation (-).

L8 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



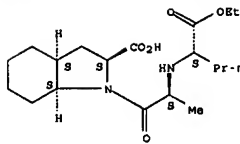
IT 924637-23-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PRSP (Preparation);  
RACT (Reactant or reagent)  
(preparation and purification of η crystal form of perindopril  
erbumine of  
high purity and good solubility)  
RN 924637-23-0 HCAPLUS  
CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, phenylmethyl ester, hydrochloride (1:1), (2S,3aS,7aS)- (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L8 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



CM 2  
CRN 75-64-9  
CMP C4 H11 N



IT 122454-52-8P  
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PRSP (Preparation); RACT (Reactant or reagent)  
(preparation and purification of η crystal form of perindopril  
erbumine of  
high purity and good solubility)  
RN 122454-52-8 HCAPLUS  
CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, phenylmethyl ester, (2S,3aS,7aS)- (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 4 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN  
ED Entered STN: 16 Feb 2007  
AB The present invention relates to a novel crystalline form of perindopril erbumine monohydrate exhibiting characteristic 2θ values and having purity not less than 99.84. More particularly, the present invention relates to a process for the preparation of the novel crystalline form of perindopril erbumine monohydrate comprising steps of (i) dissolving perindopril erbumine in water; (ii) extracting the solution with toluene or xylene; (iii) removing water from the aqueous layer obtained from step (i); adding a polar solvent to the mass obtained from step (ii) at 20 to 45°; and (iv) filtering off the solid obtained.  
ACCESSION NUMBER: 2007:175533 HCAPLUS  
DOCUMENT NUMBER: 146:236293  
TITLE: Preparation of novel crystalline form of perindopril erbumine monohydrate  
INVENTOR(S): Ujjagar, Ashish; Kochrekar, D. A.; Sarjekar, Pushpalata  
PATENT ASSIGNEE(S): Arch Pharmalabs Limited, India  
SOURCE: PCT Int. Appl., 21pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007017893	A2	20070215	WO 2006-IN155	20060504
WO 2007017893	A3	20070510		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BP, BJ, CP, CO, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TO, BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, SA, SP, OA

PRIORITY APPLN. INFO.: IN 2005-MU562 A 20050505  
IT 690267-97-1P, Perindopril erbumine monohydrate  
RL: PSP (Physical, engineering or chemical process); PRP (Properties);  
PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PRSP (Preparation); PROC (Process); USBS (Uses)  
(preparation and purification of crystalline form of perindopril  
erbumine monohydrate  
of high purity)  
RN 690267-97-1 HCAPLUS  
CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[[[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]octahydro-, (2S,3aS,7aS)-, compd.  
with 2-methyl-2-propanamine, hydrate (1:1:1) (CA INDEX NAME)